

Attorney Docket No. 50277-1546

REMARKS

No claims have been amended, cancelled, or added. Hence, claims 1 – 20 and 41 – 60 are pending in the application.

SUMMARY OF REJECTIONS/OBJECTIONS

Claim 7 is rejected under U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which application regards as the invention.

Claims 1 – 20 and 41 – 60 are rejected under 35 U.S.C 103(a) as being unpatentable over Japanese Publication No. 11-161656, herein Sasaki, in view of U.S. Patent No. 6,615,241, herein Miller.

As a preliminary matter, Applicant has not received a complete copy of Sasaki, and in particular, the second page of the "PATENT ABSTRACTS OF JAPAN". Applicant respectfully requests that the missing page be furnished.

Applicant has reviewed Sasaki and has found Sasaki to be, on the whole, clearly inscrutable and incomprehensible. It contains many sentences that are incomplete and many of its phrases cannot be understood. It is obvious that Sasaki was never proofed by someone with a command of the English language, and that it was published with complete, utter, and egregious disregard for its comprehensibility. As a result, the Office Action may be based on guesswork as to the content of Sasaki. While the present Office Action's citations to Sasaki cite specific paragraphs and elements in the paragraphs, the citations may not provide adequate notice or reasonable particularity with respect to the basis of the rejections, given the condition of Sasaki. Applicant respectfully requests that if a future Office Action relies on Sasaki, that the Office Action provide further detail on

Attorney Docket No. 50277-1546

the interpretations of Sasaki on which the rejections are based, and/or that the services at the Translation Branch of the Scientific and Technical Information Center be used.

Fortunately, the differences between Sasaki and cited art are so fundamentally different that, despite the condition of Sasaki, Applicant has determined that the cited art in no way impairs the patentability of the claims.

REJECTION OF CLAIM 7 UNDER 35 U.S.C 112

Claim 7 was rejected because the phrase "as if" allegedly renders the claim indefinite because it is unclear whether the limitation following the phrase is part of the claimed invention.

The phrase "as if" is commonly used in the English language. In fact, *The American Heritage® Dictionary of the English Language*, Fourth Edition, defines the phrase as a conjunction and its first definition as "In the same way that it would be if: *looked as if she were made of ice.*"

In the claim limitation in issue, the conjunction "as if" refers to "reference", and thus the phrase following the conjunction modifies the term "reference", limiting its definition to a reference that refers to the data in the way that a reference would if the data was stored in a multi-dimensional array.

The Office Action based the rejection on MPEP 2173.05(d). This section specifies that exemplary claim language that states examples may lead to confusion over the intended scope of a term. Exemplary language can occur when, for example, a limitation includes a phrase like "for example" or "such as". Such phrases denote that that which follows is an exemplary (i.e. is an example). However, as shown above, the phrase "as if" does not denote that that which follows is exemplary. Therefore, the claim is not stating

Attorney Docket No. 50277-1546

an example and there should be no confusion with regard to the scope of the limitation in issue as a result of exemplary claim language. Reconsideration is requested.

REJECTIONS BASED ON 35 U.S.C 103

Claim 1

Claim 1 recites:

in response to receiving said database query, the database server executing the query by performing steps that include:
retrieving data from a relational structure;
storing the data in a non-relational structure that can be addressed as a multi-dimensional array; and
performing said operation specified in the database query on said data.

Claim 12 recites:

in response to receiving the database query, the database server performing the steps of:
retrieving a first set of data from a first relational structure;
storing the first set of data in a non-relational structure; and
manipulating the first set of data by performing the operation previously specified in the database query.

Claims 1 and 12 require the step of storing data, retrieved from a relational structure, in a non-relational structure that can be addressed as a multi-dimensional array, where the step is performed by a database server in response to receiving a database query as part of executing the query. The cited art does not disclose much less suggest a database server responding to a database query in this way.

Description of Sasaki

The Office Action alleges that Sasaki discloses or suggests this feature as well as other features in claims 1 and 12. Sasaki enables a user that does not understand SQL

Attorney Docket No. 50277-1546

syntax to request data that conforms to retrieval and extraction conditions by entering those retrieval and extraction conditions into a spread sheet. The spread sheet software is executed on a client computer of a database server. (processes 111 in Abstract(57)) Processes on the client computer generate an SQL statement, based on the retrieval and extraction conditions entered into the spread sheet, send the SQL statement to the database server, and display the data extracted from the database "on the spread sheet software". (processes 112 and 113 in the Abstract(57)). Processes on the client store the retrieval and extraction conditions in relation to a menu, enabling the conditions to be used repeatedly by, presumably, selecting a menu item. (Processes 115 and 116 in the Abstract (57))

Sasaki Fails to Suggest in any way all Features of Claims 1 and 12

The Office Action has equated the spreadsheet, (as modified by the teachings of Miller), to the non-relational structure cited in claims 1 and 12. Even if this analogy is true, the cited fails to suggest all features of claims 1 and 12. Claims 1 and 12 require the following features:

- (1) that a database server perform the act of storing data retrieved from a relational structure in a non-relational structure that can be addressed as a multi-dimensional array;
- (2) that the database server perform this act in response to receiving a query that specifies operations for manipulating the data; and
- (3) that the database server perform this act as part of executing the query.

In the cited art, a client, and not the database server, stores the data extracted from the database in the spreadsheet. Further, the client stores the data in response to receiving

Attorney Docket No. 50277-1546

data extracted for a query but not in response to receiving the query. Even more, the client does not store the data as part of executing the query.

While the database server receives a query (i.e. SQL statement) and executes the query, Sasaki does not disclose or suggest in any way that a database server stores data in a non-relational structure in response to receiving the query and as part of executing the query. The only act that Sasaki teaches a database server performs in response to receiving a query is to extract the data specified by the SQL statements.

The Office Action, citing three sections of Sasaki, also equates a non-relational structure as claimed to "data [that] is stored in record medium", and presumably equates storing data in the record medium to the database server storing the data in the non-relational structure.

The first of the three sections cited, [0002] lines 1 – 12, does not even contain the term "record medium". As best as Applicant can determine, this section describes a client-server type database system in which a PC is a client that uses table data accessed in a database, describes that the PC runs spreadsheet software and that the spreadsheet software has a GUI that allows a user to easily set "item and reference conditions", and describes that software can be record "data ejected" by saving it as a file. Nothing about this section suggests that the record medium is data stored by a database server, much less that data is stored in a non-relational structure by a database server in response to executing a query and as part of executing the query, as claimed

The second section cited, [0019], lines 1 – 12, does contain the term "record medium". This section states that a "record medium" records a control program, makes retrieval and extraction conditions, and displays data on the spreadsheet software on a client machine. The things attributed to the record medium imply that the record medium

Attorney Docket No. 50277-1546

is not medium that holds data (much less data in non-relational structure that can be addressed as multi-dimensional array), but is instead a medium that holds program code. In fact, section [0057] states "The record medium which recorded the program code will constitute this invention." The data on the record medium which has been alleged to be data in a non-relational structure is in fact computer instructions on a record medium, and therefore the teachings about the record medium cannot suggest in any way a non-relational structure in which a database server stores data in response to receiving a query as part of executing the query as claimed.

The final section cited is [0022], lines 1 – 18. This section reiterates what is described in the abstract, which is summarized above. (see section Description of Sasaki). For reasons explained earlier, this section fails suggest in any way data that is stored by a database server in a non-relational structure in response to receiving a database query and as part of executing the query.

Based on the foregoing, the cited art fails to suggest in any way all the features of claims 1 and 12. Reconsideration and allowance is requested.

Claim 7

Claim 7 recites:

a database server receiving a database query that:

references data in a relational structure as if the data was stored in a multi-dimensional array,

in response to receiving said database query the database server executing the query by performing steps that include:

Claim 7 requires a database server that executes a database query that references data in a relational structure as if the data was stored in a multi-dimensional array.

Attorney Docket No. 50277-1546

The Office Action has failed to allege that the cited art teaches about such database queries, much less that a database server executes them, as claimed. Perhaps this limitation was ignored because the limitation was allegedly indefinite, which, as explained above, it is not. Nevertheless, the Office Action has failed to even allege a prima facie case.

Applicant has reviewed the cited art and has not found any suggestion of a database query that references data in a relational structure as if the data is stored in a multi-dimensional array. In fact, the cited does not appear to contain any teaching about how a query or SQL statement references data.

DEPENDANT CLAIMS

The pending claims not discussed so far are dependant claims that depend on an independent claim that is discussed above. Because each of the dependant claims include the limitations of claims upon which they depend, the dependant claims are patentable for at least those reasons the claims upon which the dependant claims depend are patentable. Removal of the rejections with respect to the dependant claims and allowance of the dependant claims is respectfully requested. In addition, the dependent claims introduce additional limitations that independently render them patentable. Due to the fundamental difference already identified, a separate discussion of those limitations is not included at this time.

For the reasons set forth above, Applicant respectfully submits that all pending claims are patentable over the art of record, including the art cited but not applied. Accordingly, allowance of all claims is hereby respectfully solicited.

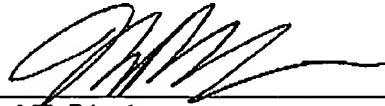
Attorney Docket No. 50277-1546

The Examiner is respectfully requested to contact the undersigned by telephone if it is believed that such contact would further the examination of the present application.

Respectfully submitted,

HICKMAN PALERMO TRUONG & BECKER
LLP

Dated: November 11, 2003



Marcel K. Bingham
Reg. No. 42,327

1600 Willow Street
San Jose, CA 95125
Telephone No.: (408) 414-1080 ext.206
Facsimile No.: (408) 414-1076

CERTIFICATE OF TRANSMISSION

I hereby certify that this correspondence is being facsimile transmitted to the Patent and Trademark Office Fax No. (703) 746-7239

on

11/11/03

by

Trudy Bagdon